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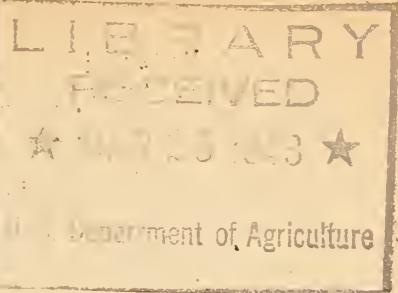
TOBACCO IN A CHANGING WORLD 1/

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Inscribed on the imposing Archives Building in the National Capital are the arresting words: WHAT IS PAST IS PROLOGUE. Seldom has deeper meaning been packed into so few words. Applying it to tobacco, the idea suggests itself that a look backward over the prologue may indicate something as to the future.

This country is at about the same point with respect to World War II that it was in 1917 with respect to World War I. The analogy is not too close because notably important changes in consumer demand which were then in their infancy are now in an advanced stage of development. Nevertheless a review of some of the developments that preceded and followed the earlier conflict are of interest. Many men now in the tobacco trade can call to mind from personal recollections the enormous changes that have occurred in the production and consumption of tobacco during the past 30 or 40 years; many more in the trade cannot do so, and possibly have not had occasion to "look at the record."

Shifts are Impressive

Most impressive is the record. It embodies sweeping and spectacular changes in the forms of tobacco consumption and marked changes in the geography and character of tobacco production. Types of tobacco have either adapted themselves to the changed requirements of consumer demand and have risen to dominance or have dwindled in importance along with the slackening consumption of products no longer occupying a place of importance in public favor.

In TOBACCO, 3 Decades Ago

Perusal of old files of TOBACCO brings out some interesting sidelights. Many of us can recall the character of cigarette offerings of 30 or more years ago. There were three classes of cigarettes: domestic, made almost exclusively from the flue-cured tobacco of Virginia and North and South Carolina; Turkish-blend, made from the above named domestic types and Turkish; and "Turkish" made from oriental tobacco mainly from Turkey. Some of the latter were manufactured in the United States; others were manufactured abroad, especially in Cairo. Egyptian and Turkish cigarettes were very popular in those days, and a large percentage of those domestically manufactured were so designated as to carry the appeal of those place names. More than half of the cigarettes advertised in TOBACCO around 1908 were called by names suggestive of the Near East. The importations of foreign cigarette tobacco during the early part of this century were very high in proportion to the total amount of tobacco used in the domestic manufacture of cigarettes, the foreign proportion having ranged from 40 to nearly 60 percent between 1909 and 1915.

The Commissioner of Corporations, reported in 1911 that during the period of 1895 to 1900 cigarettes manufactured exclusively from the bright leaf of Virginia and North Carolina began to lose some of their popularity and that while the demand for Turkish cigarettes increased very rapidly the cigarettes of this class apparently never amounted to more than one percent of the total up to 1900. These were made by small concerns employing hand labor exclusively. The increased popularity of the Turkish cigarette made it an important factor after 1900. Turkish and Turkish blended cigarettes supplanted some of the older domestic brands. From 1906 to 1910 sales of cigarettes more than doubled, "principally due to the development of the new blended brands." In 1907 Turkish cigarettes amounted to approximately 31 percent of the total of 5,256 million cigarettes manufactured, and in 1910 about 31 1/2 percent of the total of 8,644 million.

All of this is significant as an indication that the straight flue-cured cigarettes were less popular than either Turkish or Turkish-blend cigarettes. The injection of burley and Maryland tobacco into the blend seems to have occurred some time around 1913. The upward sweep of cigarette sales since that year testifies to the popularity of this new blend, which, with some variations as to proportion, is practically standard.

#### From Period of Opposition

No one factor can be pointed to with certainty as the primary cause for the acceleration in cigarette consumption that became noticeable after 1908 and much more pronounced after 1916. There were numerous factors. To begin with the country had emerged from a period of 25 or more years during which the cigarette had been subjected to newspaper tirades, anti-cigarette legislation, and, no doubt, pulpit castigation. Those were the days when cigarette smokers were called "cigarette fiends," and agitated reformers referred to cigarettes as "coffin nails." The anti-cigarette legislation continued for some time but newspaper attacks subsided. Significant of the change was an editorial in American Medicine refuting the claim of harmful effects from smoking tobacco. This was noted in an editorial in TOBACCO in May 1908.

An earlier editorial in TOBACCO, January 9, 1908, referred to an ordinance introduced in the New York Board of Aldermen to prohibit smoking by women in hotel dining rooms, restaurants, cafes and other public places. The editor commented that "any serious attempt at legislation against smoking by women is surest of all ways to bring about a considerable increase in the practice." If this was prophecy, that word "considerable" stands as an example of magnificent understatement.

Cigarettes is the word - the key to one of the most revolutionary changes ever to visit the tobacco industry. The spirit of change characterizes the whole history of tobacco since Jamestown, although changes as a rule have been rather slow and orderly in their progress. But reviewed in perspective the vast changes and their ramifications that have accompanied the rise of the cigarette during the present century seem to have been rather convulsive. Consider the following comparisons for 10-year intervals:

Table 1.-Manufactures of small cigarettes

Year	Number manufactured	Tobacco used			Percentage of total
		Billions	Quantity Million lb.	Percent	
				Percent	
1900	3.3		10.7 1/	2.9	
1910	8.6		25.5 1/	4.8	
1920	47.4		146.8	22.9	
1930	123.8		347.9	44.6	
1940	189.4		535.2	58.0	
1941	214.0 2/		600.0 3/	60.0 3/	

1/ Based on recomputation to correct excessive allowance for stemming losses involved in early reports.

2/ Estimated from tax-paid withdrawals, Bureau of Internal Revenue.

3/ Preliminary estimate.

Compiled, 1900 to 1940, from annual reports of the Commissioner of Internal Revenue.

In other words, we manufactured in 1940 more than 57 times as many small cigarettes as in 1900. The figure probably rose to about 65 times as many in 1941, and only the future can tell how much farther the pendulum will swing.

Numerous interesting questions are raised by this striking development. For instance, what circumstances surrounded the beginning of the real rise in cigarette consumption? How much of it was attributable to the war-time conditions of 1914-1918? Are present war-time conditions likely to have a similar effect? What have been the collateral effects?

Among the factors which seem to me to have had an important bearing on the rise of the cigarette industry are (1) the development of the tobacco trust and (2) the development years later of the flue-cured - burley - Maryland - Turkish cigarette blends.

However rapacious and ruthless the tobacco trust may have been, it cannot be denied that it accomplished certain very important results. In place of a large number of small manufacturing concerns apparently incapable of developing to national scope their manufacturing and distributing organizations, there came into being one powerful organization which could bring about a greater concentration of effort in developing and selling brands on a nation-wide scale. The dissolution of the trust into successor companies had the effect of reestablishing competition, but among a relatively small number of strong companies rather than among a large number of weak ones.

This is not to throw a mantle of pseudo-virtue over the operations of the trust, but merely to acknowledge that when the Supreme Court had completed its job and its orders had been carried into effect, the tobacco industry was better organized than ever before for promoting tobacco sales and providing a market for the growers. This, I think, was an important phase of the prologue in that it established a favorable setting for exploitation of the peculiarly American style cigarette blend when it later made its appearance.

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The adoption of the blended cigarette, combining a mixture of several domestic tobaccos and a flavoring of oriental, must be accounted one of the significant factors in carrying the cigarette industry to its present enormous proportions. The few straight type cigarettes still on the market, although once predominant in their field, are now no more than specialty sidelines.

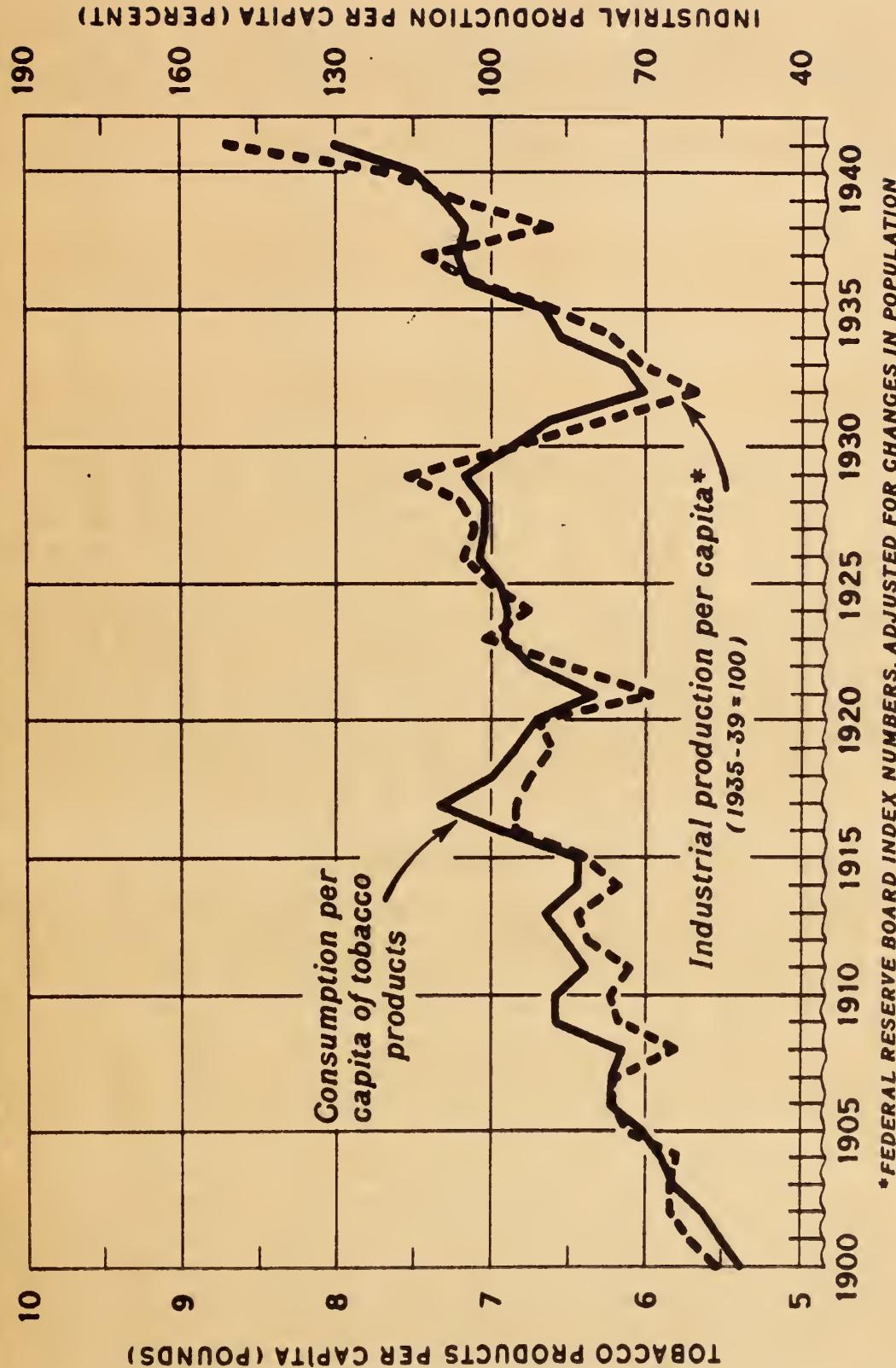
Even so, it cannot be overlooked that in many other countries the cigarette business has staged a somewhat similar rise largely on the basis of unblended tobacco. The tobacco used may be Turkish, flue-cured, fire-cured or some other type, but there seems to be comparatively little blending. This may or may not be related to the fact that whereas between 1913 and 1935 cigarette consumption in the United States increased about 750 percent, in Europe it increased less than 250 percent. It is worth noting in this connection, that during recent years prior to the outbreak of World War II cigarettes blended after the American pattern were becoming increasingly popular in numerous European countries, especially in the Baltic States.

What was the influence of the first world war on cigarette consumption? Aside from the fact that industrial activity was greatly accelerated by the war, with an immediate effect on tobacco consumption (see chart on next page), it is difficult to determine and measure the factors which affected the use of cigarettes. Nevertheless, the conditions surrounding the war effort appeared to have a good deal to do with the sudden increase of smoking among women. Almost overnight, it seemed, public places such as restaurants and hotel lobbies were filled with women and girls amateurishly and self-consciously puffing at cigarettes. They are still puffing, but with more poise and sang-froid. It should be remembered, also, that the war brought a marked change in social attitudes, of which increased smoking by women was symptomatic. It was part of what many of them regarded as emancipation from the rigid restrictions of the old order. The extent of increase in cigarette consumption due to women cannot be measured but must have been very great, and the tobacco growers owe them a debt of gratitude.

One is inclined to wonder whether the nervous tension induced by war activities - the civilian as well as military - did not have much to do with the rapid increase in cigarette consumption. Under conditions of stress people welcome the soothing effect of tobacco, and cigarettes afford a short smoke that seems to fit in with the quickened pace of war-time.

Finally, also, the direction of change in tobacco-consuming habits seems always to have been from stronger tobacco to milder, from chewing to pipe smoking, from cigars or pipe smoking to cigarettes. If a tobacco product milder than the cigarette ever comes along perhaps it will become popular.

CONSUMPTION PER CAPITA OF ALL TOBACCO PRODUCTS, AND  
INDUSTRIAL PRODUCTION PER CAPITA, UNITED STATES, 1900-1941



U. S. DEPARTMENT OF AGRICULTURE

NEG. 24111 BUREAU OF AGRICULTURAL ECONOMICS

WHY IS THE CONSUMPTION OF TOBACCO ACCELERATED IN A WAR PERIOD?

Above chart shows the intimate relationship between the per capita consumption of tobacco products, considered as a total, and industrial production per capita. It suggests, among other things, that the principal reason why tobacco consumption increases in war-time is the greatly accelerated pace of industrial activity. The statistics of individual products entering into total tobacco consumed indicate that in times when great industrial activity creates widespread employment, consumption runs strongly to cigarettes and cigars; and conversely, in times of slackness in industry and widespread unemployment, consumers not only consume less tobacco, but shift noticeably to less expensive tobacco products.

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ДОМОСЕДІВСТВО ВІД СВІТОВИХ КОЛІНІЙ

The extent of rise in cigarette manufacture was shown in Table 1. Table 2, following, shows the changes in consumption of cigarettes and other products on a per capita basis.

Table 2.-Per capita consumption of tobacco products in the United States by 5 year intervals 1900 to 1940, and estimated for 1941 1/

Year	Ciga-		Chewing tobacco	Smoking tobacco		Snuff	Total
	Cigars	Pounds		Cigarettes	Pounds		
1900	1.30	0.11	2.69	1.07	0.21	5.38	
1905	1.54	0.13	2.54	1.55	0.26	6.02	
1910	1.49	0.28	2.71	1.76	0.34	6.58	
1915	1.47	0.56	2.33	1.75	0.32	6.43	
1920	1.66	1.29	2.05	1.36	0.34	6.70	
1925	1.37	2.05	1.77	1.44	0.33	6.96	
1930	1.18	2.73	1.35	1.32	0.33	6.91	
1935	0.96	3.02	0.90	1.49	0.28	6.65	
1940	1.02	3.88	0.76	1.54	0.29	7.49	
1941	1.09	4.39	0.74	1.50	0.30	8.02	

1/ In the above table cigars and cigarettes are expressed in pounds of unstemmed dry weight tobacco used in manufacture. The other products are shown in manufactured weights.

As late as 1910, cigarettes ranked lower than any other product in per capita consumption. The order in which cigarettes overtook and passed other products is as follows: they passed snuff in 1911, cigars and smoking tobacco in 1923, and chewing tobacco in 1924. Since that year they have exceeded any other single tobacco product in consumption per capita and since 1939 they have exceeded all other products combined.

#### How Reliable is 'Per Capita'?

So far, a steady and significant downward trend in per capita consumption of a tobacco product has foreshadowed an ultimate decline in the total output of that product. The number of years that elapse between the two depends upon two things: the rate of decrease in per capita consumption, and the rate of increase of population. Up to a certain point the effects of a decrease in per capita consumption can be offset by the mere increase in the total number of users of the product. The time comes, however, when the reverse is true. For example, although the consumption of smoking tobacco per capita has been decreasing for many years, the total amount consumed is now at the highest level in its history. The maximum annual total of plug, twist and fine cut chewing tobacco manufactured, 205.9 million pounds, was not reached until 1917, but per capita consumption had been decreasing almost uninterruptedly at least since 1910, and probably longer. In fact, a hundred years ago most of the tobacco manufacturing industry centered on the production of chewing tobacco. The high point in the manufacture of cigars was reached in 1920, 13 years after the downward trend began in number consumed per capita. But in both chewing tobacco and cigars the consumption rate eventually decreased so far as to offset the effect of the increasing population, with the result that total consumption reached its maximum and began to decline.

### Chewing Vs. Smoking

The example of chewing tobacco is not a safe guide as to smoking tobacco. There are important differences. Tobacco chewing is taboo in polite society; the era of the shiny brass cuspidor and the box of sawdust is vanishing, and the sidewalk sharp-shooters have almost disappeared. But it is difficult to concede that a similar fate will ever overtake smoking tobacco. No one can see far enough in the future to forecast a time when the pipe will not still be the symbol of a contented mind, the boon companion, the joy-smoke and the solace of rich and poor alike. And if eventually the total quantity of pipe tobacco consumed annually in the United States enters into a consistent decline, it will be because of the increasing popularity of the cigarette as a short, mild smoke - not because of social proscriptions, as in the case of chewing tobacco.

The changes in form of tobacco consumption since 1900 have had marked effects on the geography of tobacco production. Until cigarettes became an important factor here and abroad, production centered on the air-cured, fire-cured, and cigar types. It was not until 1926 that North Carolina took away from Kentucky the leadership in total pounds of tobacco grown. Production of tobacco in Kentucky in 1940 was almost exactly the same as in 1900, 339 million pounds as against 332 million pounds, but with dark types occupying a relatively minor position in 1940. They occupied a very important position in 1900, and their importance increased up into the early 1920's, since which time their decline has been rapid.

Burley tobacco did not experience any very consistent increase in volume of production between 1909 (the first year for which we have a record by types) and 1923, although in between there were several years of small crops and some of rather large ones.

### Burley Type Changes

The most significant change as to burley during the latter part of that period was a gradual change-over in varieties of seed planted and spacing of plants in the field, directed at the harvesting of a thinner type of leaf. By this process, which has been much further developed in recent years, burley was transformed from a predominantly filler or chewing tobacco type to a predominantly smoking and cigarette type. The fine heavy leaf grades that once commanded premium prices are now less sought after than are the flyings and lugs. Trash leaves that a generation ago were either stripped off in the field and discarded, or were pushed aside as waste in the stripping sheds, are now among the big money producers.

Greatest changes are those registered in the flue-cured district during the period 1900 to 1930 - the latter year chosen as the one in which production of bright tobacco reached its highwater mark. North Carolina rose from 119 million pounds in 1900 to 582 millions in 1930; South Carolina from 21 to 99; Georgia from 1 (which may not have been flue-cured) to 103.

### What About the Future

This writer's ancestry does not include any seers, crystal-gazers or prophets, and this article is not written in a spirit of prophecy. The effort here has been to call to mind some of the salient features of the revolutionary changes that have occurred in the production and consumption of tobacco during the present century. Consideration of those changes suggests certain factors which might well be pondered by those who feel impelled to peer into the future. Grouped as to products, they are:

Cigarettes - World War I greatly accelerated the rising consumption of cigarettes. That expansion continued at varying rates until the onset of the depression period in 1930. The ground lost in the next three years was more than made up in 1934, since which time the rise has been rapid.

Is there such a thing as a saturation point? Manifestly there must be, - but where? In 1917, when we entered the first world war, we consumed 1.08 pounds of cigarettes per capita; in 1941, 4.39. Whether due to the war or not, the vast potential market of women smokers was developed, which had much to do with the fact that total cigarette consumption has multiplied four-fold in the intervening quarter of a century. The point is that no such untapped market is ahead of the industry now. Assuming that a limit exists somewhere we must be much nearer that point now than in 1917, and it seems reasonable to suppose that a leveling-off in the consumption curve may not be many years distant.

On the opposite side of the ledger is one factor in the equation which has not received much attention, and that has to do with the percentage of the total population that is of smoking age. Over a long period of years the death rate per thousand has been decreasing, and therefore the average age has been increasing. The effect of this is that since people live to a greater age, the percentage of total population represented by the ages 15 or 20 and more has become larger and larger.

Furthermore, for a number of years the birth rate has been decreasing, which has had the effect of diminishing the percentage of those of non-smoking age. These developments have an important bearing on consumption rates.

Pipe Tobacco - Statistics reveal that decreases in the per capita consumption of smoking tobacco have coincided with marked increases in cigarette consumption especially when cigars also increased; and frequently that when cigarettes have decreased or have only moderately increased and cigars have decreased, pipe smoking has increased. To the extent that these observations afford a reliable guide, it would appear likely that so long as present trends in cigarette and cigar consumption are maintained further declines may be expected in per capita consumption of smoking tobacco; and that these declines may so far offset increases in population as to bring about a decrease in the total output of smoking tobacco. Also it would appear that under changed conditions pipe smoking might increase again. Restoration of a peaceful, normal way of life and the lessening of tension that would come with it might have that effect. Certainly the recurrence of depression, entailing increasing numbers of unemployed persons and reduced national income, would have the effect of increasing pipe smoking at the expense of cigars and cigarettes.

Cigars - They reached their lowest point as to the number consumed per capita, 36.6, and total number manufactured, 4.3 billion, in the depression year of 1933. The upward trend in cigar consumption since 1933 cannot be wholly dissociated from the improvement in economic conditions; nor in my opinion can it be attributed solely to that improvement. After all, a good cigar is the aristocrat of the tobacco world; and cigar smoking, far from being under a social ban such as pertains to chewing and snuff-taking, carries with it an appeal peculiarly its own. There have been recent indications of re-awakening interest in cigars, not merely among oldsters who find themselves able once more to afford them, but among youngsters just beginning to smoke.

Is it to be expected that any tobacco habit, chewing for example, is likely to ever become extinct? Hardly. Chewing is currently on the increase because of the number of defense workers who are not allowed to smoke. Many of these, when the war is over, will go back to smoking. Allowing for further decreases later on in the consumption of chewing tobacco a limit must be reached sometime. That it will ever make an important recovery is unconceivable.

As we shift from the prologue to the play in which future developments in domestic tobacco consumption will unfold, the principal actors to watch are cigarettes, pipe tobaccos, and cigars, and the way they individually respond to changing economic conditions and changes in consumer preference.